



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/590,649      | 01/04/2007  | Raiko Milanovic      | 1034193-000058      | 1499             |

21839 7590 03/02/2009  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

|          |
|----------|
| EXAMINER |
|----------|

STEVENS, THOMAS H

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2121

|                   |               |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

03/02/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

|                              |                               |                                  |  |
|------------------------------|-------------------------------|----------------------------------|--|
| <i>Office Action Summary</i> | Application No.<br>10/590,649 | Applicant(s)<br>MILANOVIC ET AL. |  |
|                              | Examiner<br>THOMAS H. STEVENS | Art Unit<br>2121                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Claims 1-18 were examined.

### *Section I: Non-Final Rejection*

#### *Claimed Subject Matter Not in Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: service appliance, while stated in the disclosure, it's not clearly defined.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2121

4. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaki (US Patent 6,701,232; hereafter Yamaki). Yamaki discloses a vehicle management system (abstract).

Claim 1. A process control system (e.g., control processes, control loops, figures 6-14)having comprising measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) wherein a) all the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) contain means for information processing (e.g., figure 6, input parameter manipulation i.e., normal or abnormal)and for data interchange between the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11), b) all the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) are connected by means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65), and c) a plurality, preferably all, of the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) have means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected.

Claim 2. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein the means for information processing (e.g., figure 6, input parameter manipulation i.e., normal or abnormal)and for data interchange between the measurement devices (figure 5, e.g., various sensors)and actuators (figure

6, element S11) are a microcomputer with interface devices for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 3. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein the means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected are an interface device for bi-directional data (wireless bidirectional data exchange, column 4, lines 55-65)interchange and a plug-in apparatus, with the interface device being designed to provide current data (column 5, lines 40-46)relating to the process state for calling up.

Claim 4. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein point-to-point links (wireless data link, column 4, lines 55-65)are produced as means for bidirectional data interchange(wireless bidirectional data exchange, column 4, lines 55-65).

Claim 5. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein a bus system (element 101a, external bus), to which all of the measurement devices (figure 5, e.g., various sensors)and actuators (figure 6, element S11) are connected, is provided as the means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 6. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 1, wherein a laptop or a PDA is used as the service appliance

Art Unit: 2121

(no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which can be connected.

Claim 7. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 1, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed to carry out plausibility checks and diagnoses (e.g., figure 6, control loop of verifying the actuator).

Claim 8. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 1, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed for preprocessing of recorded data (figure 1, element 151).

Claim 9. A method for operation of a process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 1, wherein data which has been recorded in measurement devices (figure 5, e.g., various sensors) of the system by sensors of the measurement devices (figure 5, e.g., various sensors) and has possibly been obtained by preprocessing is linked to data from other measurement devices, (figure 5, e.g., various sensors) and all of the data is stored (databases, element 151) and is transmitted to respective other measurement devices (figure 5, e.g., various sensors) and to actuators (figure 6, element S11), and data which has been called up from a service device which is connected to measurement devices (figure 5, e.g., various sensors) or actuators (figure 6, element S11) is emitted.

Claim 10. The method as claimed in claim 9, wherein self- diagnoses are carried out in the components of the process control system, (e.g., control processes, control loops, figures 6-14)whose results are likewise stored (databases, element 151) such that they can be called up by a service device.

Claim 11. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 2, wherein the means for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31)which can be connected are an interface device for bi-directional data (wireless bidirectional data exchange, column 4, lines 55-65)interchange and a plug-in apparatus, with the interface device being designed to provide current data (column 5, lines 40-46)relating to a process state for calling up.

Claim 12. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 11, wherein point-to-point links (wireless data link, column 4, lines 55-65)are produced as means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 13. The process control system (e.g., control processes, control loops, figures 6-14)as claimed in claim 12, wherein a bus system (element 101a, external bus), to which

Art Unit: 2121

all of the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are connected, is provided as the means for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65).

Claim 14. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 13, wherein a laptop or a PDA is used as the service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which can be connected.

Claim 15. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 14, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed to carry out plausibility checks and diagnoses (e.g., figure 6, control loop of verifying the actuator).

Claim 16. The process control system (e.g., control processes, control loops, figures 6-14) as claimed in claim 15, wherein the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) are designed for preprocessing of recorded data (figure 1, element 151).

Claim 17. A method for operation of a process control system as claimed in claim 16, wherein: data which has been recorded in measurement devices (figure 5, e.g., various sensors) of the system by sensors of the measurement devices (figure 5, e.g., various sensors) and has possibly been obtained by preprocessing is linked to data from other measurement devices, and all of the data is stored (databases, element 151) and is



Art Unit: 2121

transmitted to the respective other measurement devices (figure 5, e.g., various sensors) and to actuators (figure 6, element S11), and data which has been called up from a service device which is connected to measurement devices (figure 5, e.g., various sensors) or actuators (figure 6, element S11) is emitted.

Claim 18. A process control system, comprising: measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11), each of which includes means for information processing (e.g., figure 6, input parameter manipulation i.e., normal/abnormal) and for data interchange between the measurement devices and actuators (figure 6, element S11); means for interconnecting the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11) for bidirectional data interchange (wireless bidirectional data exchange, column 4, lines 55-65); and means, provided with multiple ones of the measurement devices (figure 5, e.g., various sensors) and actuators (figure 6, element S11), for data interchange with a service appliance (no clear definition of a what service appliance is; however, the Office provides an example of an apparatus, Engine control unit, column 8, lines 28-31) which can be connected.

## *Section II: Response to Arguments*

*11/2102(e)*

5. The 102(e) by Breed and the 112 are withdrawn.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure:

- US 20060049961 disclose a sensor unit (1) having a measured signal receiver (4), which registers a measured signal (9), an A/D converter (5) for digitizing the measured signal (9), a transceiver device (6) for wireless data communication to an environmental device (2), and a processor (7).
- US 7418992 discloses a controller for at least one heater utilized in an injection molding system, which includes a regulated voltage supply that is electrically connected to the at least one heater utilized in an injection molding system, at least one sensor operatively associated with at least one heater and utilized in an injection molding system, at least one digital signal processor that is operatively connected to the at least one heater utilized in an injection molding system, the regulated voltage supply and the sensor operatively associated with the at least one heater utilized in an injection molding system based on feedback from the at least one sensor.
- US 5050080 discloses a diagnostic system for diagnosing an electronic control system of a vehicle wherein the electronic control system has a first memory for storing data.
- US 5482314 discloses a system for sensing the presence, position and type of an occupant in a passenger seat of a vehicle, as well as for sensing the presence of a rear-facing child seat therein, for use in enabling or disabling a related airbag activator.

Art Unit: 2121

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Albert Decady /  
Supervisory Patent Examiner  
Tech Center 2100

/Thomas H. Stevens/

Examiner, Art Unit 2121